REMARKS

This is in response to the Office Action dated August 11, 2004, claims 1-12 are pending in the case. Claims 9-12 are allowed. Claims 1-8 stand rejected. This rejection is traversed.

Claims 1 and 2 are amended. Claims 13-20 are newly added.

Applicant respectfully requests reconsideration of the claim rejections based on the above amendment and following remarks.

In the Drawings:

In pursuance of the Examiner's instructions, the Applicant has attached a Replacement Sheet for Figure 3 including the Examiner suggested changes. Figure 3 now indicates that it is a Prior Art figure.

Claims Rejections – 35 U.S.C. §102(b)

Claims 1-8 are rejected under 35 U.S.C. §102(b) as being anticipated by U. S. Patent No. 6,084,547 to Sanderford.

Sanderford discloses a radio locating system to locate the position of an unknown transmitter. Sanderford uses a central processing device 100 that "collects information from several receiving sites 102" and also uses neural networks and GPS (Global Positioning System) information. (Col. 10, lines 7-8; 19-24). The central processing device 100 utilizes radio signals from land based transmitters as main means to locate position of an unknown transmitter. The central processing device 100, which can be a neural network (Col. 10, lines 17-19), receives multiple inputs including GPS signals.

Claim 1 of the present invention is directed to *inter alia*, "a neural network for learning and predicting the positions..." which uses inputs from two separate sources, i.e., a "a TDOA signal processor" and a "a GPS signal processor". Unlike, the Applicant's invention, Sanderford does not disclose an independent neural network processor that uses inputs of a TDOA (Time Difference on Arrival) processor and a GPS (Global Positioning System) processor to locate mobile terminals. Sanderford uses a central processor to directly receive inputs signals from multiple sources one of which can be a GPS a source, which is very different from using a dedicated TDOA processor and a separate GPS processor as in the Applicant's invention.

Claim 1 includes recitation "a neural network ...predicting positions...based on a selective use of signals received from the GPS ...TDOA signal processor". Sanderford does not disclose any selective use of GPS signals by a neural network. On the contrary, Sanderford uses all inputs to its neural network to calculate location. For example, Sanderford in its Figure 5 shows various inputs 511-516, where 513 is a GPS input, are used by its neural network to calculate location.

Further, Sanderford's approach does not disclose selective use of processed GPS signals "when a predetermined number of satellites are in view" (Claim 1); "...when four or more GPS satellites are in view" (Claim 2), but rather uses homogenous processing of all input signals. Sanderford does not teach selective use of GPS signals when a predetermined number (four or more) of GPS satellites signals are available.

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Therefore, Sanderford fails to disclose each and every element of the claim 1 and hence does not anticipate Claim 1. Claims 2-8 depend on Claim 1 and hence are allowable for at least the same reason(s) as Claim 1. The applicant therefore respectfully requests the Examiner to withdraw the rejection of Claim 1-8 and allow the same.

Newly added Claims 13-20 are directed to a GPS based navigation system that uses a neural network. Claim 13 recites "a neural network having weights...for ...predicting positions...based on...TDOA signal processor when GPS signals...are available from less than four satellites." Hence, Claim 13 is not disclosed or suggested in Sanderford. Further, Sanderford does not disclose using TDOA signals when less than four appropriate GPS satellite signals are available for tracking a mobile terminal (Claim 19). Hence, newly added Claim 13 and claims 14-20 that depend on Claim 13 are also allowable over Sanderford. The applicant therefore respectfully requests the Examiner to allow Claims 13-20.

The Examiner's withdrawal of the claim rejections is respectfully requested. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,

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IN THE DRAWINGS:

Following the Examiner's instructions, the Applicant presents replacement drawing for Figure 3. The replacement sheet for Figure 3 is attached and identifies the Figure 3 as Prior Art.